Manitoba Agriculture

Guidelines for Estimating

WEANER PIG PRODUCTION COSTS

Based on 80 Sow Farrow Operation

Information Update

DATE: January, 1988

This publication is intended to provide a format and a set of guidelines for determining costs of production for a hog enterprise. The cost figures listed in this budget are estimates and not figures obtained from an actual survey of the hog industry in Manitoba. Adjustments will be necessary when applying these figures to your own enterprise. The assumptions on which the costs are based are outlined in the supporting pages. These assumptions were arrived at using the breeding stock, management practices, and facilities commonly employed on this size of an enterprise in Manitoba. Productivity and performance assumptions are based on data from national and provincial herd recording programs as well as data collected from numerous herds by feed companies and other organizations. Adjustments will be necessary where individual herd productivity and performance levels differ from those listed.

Accurate, up-to-date, production and financial records are essential for the effective application of these guidelines to an individual operation. Without such information accurate cost of production projections cannot be determined.

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WEANER PIG PRODUCTION COSTS
(80 SOWS)

A. OPERATING COSTS	$/Sow/Year	Your Cost	$/Pig Sold	Your Cost
1. Feed Costs:				
1.01 Sow Lactation Ration	$ 49.90		$ 3.36	
1.02 Sow Gestation Ration	115.77		7.80	
1.03 Boar Ration	6.72		0.45	
1.04 Creep Feed	4.32		0.29	
1.05 Starter Ration	124.16		8.37	
Total Feed Cost	$300.87		$20.27	
2. Other Operating Costs:				
2.01 Veterinary Medicine & Supplies:				
Professional Services	$ 8.00		$ 0.54	
Medication	22.00		1.48	
2.02 Maintenance & Repairs	12.35		0.83	
2.03 Hydro (Heat)	48.00		3.23	
2.04 Insurance	10.22		0.69	
2.05 Manure Haulage	12.05		0.81	
2.06 Office Supplies	8.25		0.56	
2.07 Marketing & Transportation	14.84		1.00	
2.08 Sow Replacement	4.22		0.28	
2.09 Boar Replacement	5.28		0.36	
Subtotal Operating Costs	$446.08		$30.05	
2.10 Interest on Operating Cost	4.98		0.34	
TOTAL OPERATING COSTS	$451.06		$30.39	
B. FIXED COSTS				
3. Depreciation:				
3.01 Buildings	$ 31.16		$ 2.10	
3.02 Equipment	61.22		4.13	
Total Depreciation Cost	$ 92.38		$ 6.23	
4. Investment:				
4.01 Buildings	$ 24.92		$ 1.68	
4.02 Equipment	24.49		1.65	
4.03 Breeding Herd	9.00		0.61	
Total Investment Cost	$ 58.41		$ 3.94	
TOTAL FIXED COSTS	$150.79		$10.17	
C. LABOUR				
30.0 hours/wk. @ $10.00 /hour	$195.00		$13.14	
TOTAL COST OF PRODUCTION	$796.85		$53.70	

ASSUMPTIONS

WEANER PIG PRODUCTION COSTS - JANUARY 1988

1. This Budget outlines the cost of production for an 80 Sow Farrowing operation with the herd performance levels listed below.
2. Buildings and Equipment are valued at new cost.
3. All feed is purchased.
4. Manure Haulage is contracted out.
5. Gilts are purchased for herd replacement.

INDICATORS OF SOW HERD PRODUCTIVITY

Sows	80
Boars	4
Litters/Sow/Year	1.80
Average Weaning Age	28
Average Born Alive per Litter	10.00
Percent Pre-Weaning Mortality	15.0
Percent Post-Weaning Mortality	3.0

PRODUCTIVITY PROFILE

	TOTAL	/SOW	/LITTER	% MORTALITY
Litters	144	1.80		
Pigs Born Alive	1,440	18.00	10.00	
Pigs Died, Pre-Weaning	216	2.70	1.50	15.0
Pigs Weaned	1,224	15.30	8.50	
Pigs Died, Post-Weaning	37	0.46	0 .26	3.0
Pigs Sold	1,187	14.84	8.25	

WEANER PIG EFFICIENCY

Days Post-Weaning	40 days
Target Weaning Weight	6.0 kg
Target Sale Weight	18.0 kg
Feed Conversion Ratio	2.10 kg starter ration/kg weight gain
Average Daily Gain	0.30 kg weight gain/day post-weaning

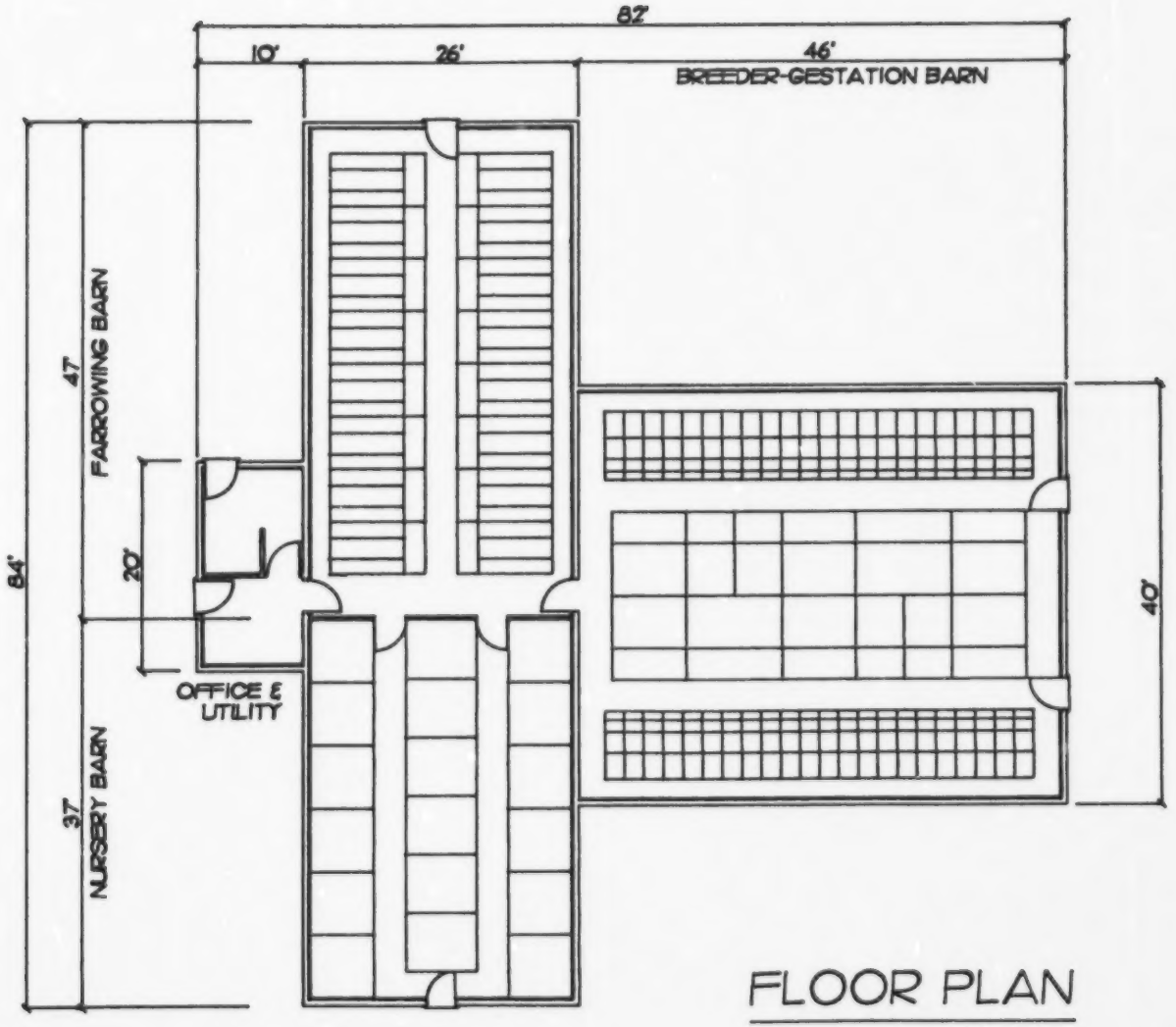
CAPITAL COSTS - SOW BARN (80 SOWS)

	ft^2	Your Farm	$/ft^2$	Your Farm	TOTAL	Your Farm	/SOW	Your Farm
Buildings								
Gestation	1,840		$11.00		$ 20,240.00		$ 253.00	
Farrowing/Nursing	2,184		12.00		26,208.00		327.60	
Office & Loading	200		17.00		3,400.00		42.50	
Total Building Cost					$ 49,848.00		$ 623.10	
Equipment								
Gestation			$10.00		$ 18,400.00		$ 230.00	
Farrowing/Nursing			$14.00		30,576.00		382.20	
Total Equipment Cost					$48,976.00		$ 612.20	
Total Buildings and Equipment Cost					$ 98,824.00		$1,235.30	
Breeding Stock								
Value of Replacement Sow	$200.00 /sow				$ 16,000.00		$ 200.00	
Value of Replacement Boar	$500.00 /boar				2,000.00		25.00	
Total Breeding Stock Cost					$ 18,000.00		$ 225.00	
TOTAL CAPITAL INVESTMENT					$116,824.00		$1,460.30	

METRIC CONVERSION	m^2		$/m^2$	
Buildings				
Gestation	170.9		$118.40	
Farrowing/Nursing	202.9		129.17	
Office/Loading	18.6		182.99	
Equipment				
Gestation			$107.64	
Farrowing/Nursing			150.70	

*FOOTNOTE: 1 ft^2 = 0.0929 m^2 1 m^2 = 10.764 ft^2 1 ft = 0.3048 m

WEANER PIG PRODUCTION COSTS - JANUARY 1988 SOW BARN



FLOOR PLAN

WORKSHEET

WEANER PIG PRODUCTION COSTS - JANUARY 1988

A. OPERATING COSTS

1. Feed Requirements and Costs:

1.01 Sow Lactation Ration

		Your Farm
	28 days Average Weaning Age	
X	1.80 litters/sow/year	
=	50.4 days lactation	
X	5.5 kg ration/day	
X	$180.00 /tonne ration	
÷	1,000 kg/tonne	
=	$49.90 /sow/year	

1.02 Sow Gestation Ration

	365 days/year	
-	50.4 days lactation	
=	314.6 days gestation	
X	2.3 kg ration/day	
X	$160.00 /tonne ration	
÷	1,000 kg/tonne	
=	$115.77 /sow/year	

1.03 Boar Ration

	365 days	
X	2.3 kg ration/day	
X	$160.00 /tonne ration	
÷	1,000 kg/tonne	
X	4 boars	
÷	80 sows	
=	$6.72 /sow/year	

1.04 Creep Feed

	0.5 kg ration/pig	
X	$12.00 /25 kg bag of creep feed	
÷	25 kg/bag	
X	18.00 pigs born alive/sow/year	
=	$4.32 /sow/year	

1.05 Starter Ration

			Your Farm
	18.0	kg Target Sale Weight	
-	6.0	kg Target Weaning Weight	
=	12.0	kg Weight Gain	
X	2.10	Feed Conversion Ratio	
=	25.20	kg ration/pig	
X	8.30	/25 kg bag of starter ration	
÷	25	kg/bag	
X	14.84	pigs sold/sow/year	
=	$124.16	/sow/year	

2. Other Operating Costs:

2.01 Veterinary Medicine & Supplies

			Your Farm
Professional Services		$8.00 /sow/year	
Medication		$22.00 /sow/year	

2.02 Maintenance & Repairs

			Your Farm
Building & Equipment cost		$1,235.30 /sow	
Percent for Rep. & Mtce.	X	1.00 % /sow/year	
		$12.35 /sow/year	

2.03 Electric Heat

			Your Farm
Usage		1,200 kwh/sow	
Rate	X	$0.0400 /kwh	
		$48.00 /sow/year	

2.04 Insurance

			Your Farm
Total Capital Investment		$1,460.30 /sow	
Insurance/$100 Capital	X	$0.70 /$100 Capital	
	÷	100	
		$10.22 /sow/year	

2.05 Manure Haulage

			Your Farm
Volume		30.0 litres/sow/day	
	÷	1,000 litres/cubic m	
	=	0.0300 cubic metres	
Haulage rate	X	$1.10 /cubic metre	
	X	365 days	
		$12.05 /sow/year	

2.06 Office Supplies

			Your Farm
Minimum Cost		$500.00	
plus:			
Number of Sows	80 sows		
X Fixed Rate/Sow	$2.00 /sow	$160.00	
		$660.00	
	/	80 sows	
		$8.25 /sow/year	

2.07 Marketing & Transportation

			Your Farm
Weaner pigs sold		14.84 pigs/sow/year	
Mktg. & Trans. rate	X	$1.00 /pig sold	
		$14.84 /sow/year	

2.08 Sow Replacement

			Your Farm
Value of Replacement Sow		$200.00 /sow	
less:			
Cull sow weight 180.0 kg/sow			
X Cull sow price $1.30 /kg			
X Dressing % 80 %			
Value of Cull Sow	-	$187.20 /sow	
Net Replacement Cost	=	$12.80	
Sow Culling Rate	X	33.00 percent	
Sow Replacement Cost/Sow		$4.22 /sow/year	

2.09 Boar Replacement

			Your Farm
Value of Replacement Boar		$500.00 /boar	
less:			
Cull Boar wt. 225.0 kg/boar			
Cull Boar price $.80 /kg live			
Value of Cull Boar	-	$180.00 /boar	
Net Replacement Cost	=	$320.00	
Boar Culling Rate	X	33.00 percent	
Number of Boars in Herd	X	4 boars	
Number of Sows in Herd	÷	80 sows	
Boar Replacement Cost/Sow		$5.28 /sow/year	

2.10 Interest on Operating Cost:

$$\frac{\text{Subtotal Operating Cost}}{\text{Turnover}} \times \frac{\text{Operating Interest Rate}}{2}$$

Where: $\text{Turnover} = \frac{365 \text{ days}}{\text{Length of Production Period (days)}}$

			Your Farm
Subtotal Operating Cost		$446.08 /sow	
Operating Interest Rate		12.00 %	
Turnover		5.37	
Length of Production Period:			
Avg. Weaning Age (days) 28 days			
Days Post-Weaning (days) 40 days			
Total 68 days			
		$4.98 /sow/year	

B. FIXED COSTS		Your Farm
3. Depreciation: $\frac{\text{Original Cost - Salvage Value}}{\text{Useful Life}}$		
3.01 Buildings		
Total Building Cost	$623.10 /sow	
Salvage Value	$0.00 /sow	
Useful Life	20 years	
	$31.16 /sow/year	
3.02 Equipment		
Total Equipment Cost	$612.20 /sow	
Salvage Value	$0.00 /sow	
Useful Life	10 years	
	$61.22 /sow/year	
4. Investment: $\frac{\text{(Original Cost + Salvage Value)}}{2}$ X Investment Rate		
Investment Rate	8.00 %	
4.01 Buildings		
Total Building Cost	$623.10 /sow	
Salvage Value	$0.00 /sow	
	$24.92 /sow/year	
4.02 Equipment		
Total Equipment Cost	$612.20 /sow	
Salvage Value	$0.00 /sow	
	$24.49 /sow/year	
4.03 Breeding Stock		
Total Breeding Stock Cost	$225.00 /sow	
(No Salvage Value)	$0.00	
	$9.00 /sow	
C. LABOUR		
Total Hours per 7-Day Week	30.0 hours/week	
Hourly Wage	X $10.00 /hour	
	X 52 weeks/year	
	$195.00 /sow/year	

FOR MORE INFORMATION SEE YOUR LOCAL MANITOBA AGRICULTURE OFFICE.

Budget
Prepared By: Ralph Pieper, Farm Management Specialist
Dennis Hodgkinson, Agricultural Engineer
Charles Grant, Farm Management Specialist
Clarence Froese, Chief, Swine Program

Barn Floorplan
Drafted By: Russ Kapty, Draftsman